NEW SPECIES OF HELMIS (COLEOPTERA)

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In the course of a recent rearrangement of my material in this genus, the following undescribed species were discovered. The detection of the identity of a species formerly described by the writer with an older species of LeConte's is also noted.

Helmis brunnescens new species.

Elongate, subparallel, brownish piceous, in part with feebly aeneous lustre in certain lights, humeral umbone and extreme apex of elytra nubilously paler; antennae, tarsi and often the protibiæ testaceous. Upper surface sparsely finely pubescent. Antennæ not quite attaining the hind angles of the thorax. Head rather finely but strongly punctate, front scarcely twice as wide as the longest diameter of the eye. Prothorax about 1/7 wider than long, sides feebly diverging to basal third, thence subparallel and slightly sinuate to the sharply defined and slightly prominent base angles; surface strongly punctate, sparsely on the disk, more coarsely and closely toward the front angles. Elytra parallel in basal two thirds, apex sharply rounded, rows of serial punctures scarcely impressed, interspaces with a regular series of fine punctures. Prosternum coarsely closely punctate; ventral segments more sparsely so. Length, 2.25 to 2.35 mm.; width about .75 mm.

Described from four specimens taken in Lake Co., California, V-1895, by Dr. E. C. Van Dyke, from whom I received them.

This species is similar in form and structure to *vittatus*, *bivattatus* and *4-notatus*, differing from all of them in the absence of elytral vittae and its somewhat coarser elytral punctures, both of the striae and interspaces.

Helmis castanipennis, new species.

Of the same size but of broader form than the preceding species, the length being rather less than 2½ times the width. Head and thorax black, elytra and body beneath brown, the elytra with or without a faint nebulous clouding medio-laterally and narrowly along the suture; upper surface thinly pubescent and moderately shining. Head sparsely very finely punctate; antennæ short, not attaining the bend in the sides of the thorax.

Thorax about 1/6 wider than long, sides diverging from the acute front angles to the basal third, thence parallel and feebly sinuate to the base angles, which are just less than right; disk with a strong longitudinal plica each side in about the basal two-fifths; sides exterior to the plica subrugosely punctate, the intermediate surface polished and sparsely punctate, a small punctiform impression each side of a feeble scutellar emargination. Elytra slightly widening to apical third, with feebly to scarcely impressed strongly punctured striae, the interspaces finely uniseriately punctate. Body beneath finely and remotely punctulate, the prosternum as usual more coarsely sculptured. Length, 2.35 mm.; width 1.1 mm.

The type is one of two examples from Wyoming, exact locality unknown. A third specimen from "W. T." appears to be identical.

This species is represented in the LeConte Collection by five examples (4 from Wyo., 1 from B. C.) placed with *divergens*, which species it agrees with nearly in size and form, but differs notably in color and in its much sparser punctuation.

Helmis immunis, new species.

Rather broadly subovate, somewhat inflated posteriorly, the elytra being widest at about their middle; piceous, feebly bronzed, elytra without trace of spots or vittae. Antennæ short, attaining the middle of the sides of the prothorax, rufotestaceous, the three outer joints sometimes infuscate. Prothorax about one third wider than long, sides nearly straight and subparallel or feebly convergent anteriorly for a short distance at base, thence more strongly convergent to the acute apical angles, surface shining, moderately closely rather finely punctate; basal striae strong, about one third the length of the thorax; base slightly emarginate before the scutellum, the punctiform foveae not very distinct. Elytra one third longer than wide, rather strongly striate, striae coarsely punctate, intervals, minutely punctulate. Body beneath brownish, sparsely punctate; femora piceous, tibiæ and tarsi rufous. Length, (type) 2.25 mm.; width, 1.2 mm.

The type is from Stratford, Conn., collected by M. P. Lappe, Aug. 29, 1919. With the type I place four examples from Clementon, New Jersey, that are unquestionably identical, though for the most part so completely incrusted as to make a study of the details of sculpture impossible.

This species belongs near *ovalis* and allies, but is at once recognizable by its more ovate form and immaculate elytra.

Helmis tardellus, new species.

Moderately elongate obovate, piceous with more or less distinct aeneous or violaceo-aeneous lustre; elytra each with two rufotestaceous spots, one at the humerus, obliquely suboval in form, extending from the base to the basal fourth, and inwardly to the third stria; the other more elongate, extending from the middle to about the apical sixth, and attaining neither margin nor suture. Upper surface distinctly fulvo-pubescent, body beneath brownish, clothed somewhat densely with short appressed yellow hair, femora except the knees similarly densely pubescent. Antennæ short, barely reaching the middle of the side margins of the prothorax, rufotestaceous basally, outer three or four joints piceous. Head and thorax alutaceous and rather finely punctured, the punctures separated on the disk by from one to two times their own diameters, the sides of the thorax exterior to the short basal plicae becoming more densely subrugosely sculptured; base with a small punctiform fovea on either side of the ante-scutellar emargination. The thorax is a little wider than long, sides divergent from apex to base, a little excurved medially. Elytra two thirds longer than wide, sides feebly arcuate and diverging in basal half, striae feebly impressed, rather coarsely punctured, interspaces with a nearly regular series of very fine punctures. Body beneath sparsely punctate laterally and posteriorly, prosternum more closely and coarsely sculptured. Length, (type) 2 mm.; width .9 mm.

Described from three examples of uniform size taken at Tyngsboro, Mass., the type and one paratype bearing date 8–31–'00, the third example without date.

This species bears a general resemblance to *elegans*, but is of broader form and more dilated posteriorly, with coarser strial punctures and smaller elytral spots. In *elegans* the humeral spot is produced inward nearly to the suture and attains the middle of the length, and the posterior spot is vittiform and much longer than in the present species.

Helmis ampliatus, new species.

Form unusually broad, oval, not inflated posteriorly, piceous bronzed, fulvo-pubescent, elytra with a reddish yellow vitta from humerus to apex, often becoming faint at basal third. Antennæ short, rufotestaceous, as long as the width of the head across the eyes. Prothorax strongly transverse, sides much rounded, subparallel in basal two-fifths, surface rather coarsely and densely punctate, the punctures separated as a rule by rather less than their own diameters; longitudinal impressed lines deep, and two-fifths as long as the thorax; base emarginate in front of the scutellum but without the punctiform foveae. Elytra one third longer than wide, sides

broadly arcuate and subparallel in basal two thirds, striae rather strongly impressed, especially laterally, and coarsely punctate throughout. Body beneath brownish, more strongly sculptured than usual. Legs piceous, the tarsi rufous. Length, (type) 2.35 mm.; width 1.25 mm., the five examples before me varying very little in size.

The type is one of three examples from Lowell, Mass., and bears date 7–23–'93. Single specimens from Stratford, Conn. (K. F. Chamberlain), and "Va." are at hand. The last named bears my label "ovalis in Horn Collection."

The present species is allied to, and undoubtedly goes as *ovalis* in many collections. It is, however, quite distinct from the LeConte type, being of much broader form, with more densely coarsely punctured thorax, the basal impressed lines being twice as long and very much deeper and coarser. In three measured specimens of *ovalis* the lengths of the elytra were respectively 1.57 (type), 1.54 and 1.49 times the width; while in four specimens of *ampliatus* the ratios were 1.35 (type), 1.30, 1.27 and 1.36. In *ovalis* the sides of the thorax are less rounded, and continuously divergent throughout their length, though less strongly so basally.

Helmis dispar, new species.

Male. Form stout, elytra very convex, moderately shining, very sparsely, finely and inconspicuously pubescent. Above black, the elytra red in about the basal third and apical fourth; beneath and legs brown. Antennæ reddish brown, terminal joint slightly dusky, fully as long as the thorax, the outer three joints not forming a club, the eighth joint being similar to the ninth and scarcely smaller. Head opaque, obscurely punctate. Prothorax a little wider than long, sides only slightly curved and continuously divergent from the apex, briefly flaring at the basal angles; disk each side with a deep oblique subbasal impression, exterior to which is an ill defined longitudinal ridge which is continued as a fine carina to the apex; surface between the lateral carinæ sparsely barely perceptibly punctate, exterior to the carinæ rugosely sculptured, and in the anterior half deeply impressed along the margin. Elytra short, ovate, one half wider than the thorax, widest near the middle, one fourth longer than wide; striae fine and finely punctate, intervals flat or nearly so, scarcely perceptibly punctulate. Body beneath and legs dark brownish red. Length, 2.1 mm.; width,

Female. Similar to the male in all essentials, but of less chunky form, twice as long as wide, basel red area of the elytra shorter and interrupted

at middle, leaving a squarish humeral spot, the apical pale area reduced to a small elongate discal spot on each at the apical fourth. Length, 2.5 mm.; width, 1.25 mm.

Described from a single pair sent by Dr. F. E. Blaisdell who collected them at Shasta Retreat, Siskiyou Co., California.

If the two specimens associated are the sexes of the same species as seems almost crtain, the difference in form between the sexes is quite unique among our known species. In the female the base of the thorax is feebly emarginate before the scutellum, and the basal foveae are quite distinct; in the male both these features are obsolete.

Helmis antennatus Fall = corpulentus Lec.

This species at the time of its description was based largely on a previously unmentioned and supposedly unique character, viz., the 10-jointed antennæ. A recent examination of the type of corpulentus Lec. shows that it possesses this character and careful comparison convinces me that the two species are identical. The LeConte collection contains four examples of corpulentus, three from British Columbia and one from Veta Pass, Colorado.

Acronycta lanceolaria Grt.

The first Acronycta lanceolaria Grt. for New Jersey was recorded by Mr. Otto Buchholz. Several years later, when we were strolling in the woods at Lakehurst (May 28th) I found one female sitting, half hidden, on a pine trunk. Later (in 1922) I saw another Acronycta high up on a pine in the same vicinity and was delighted to have a second specimen of that species. I did not mind the trouble of getting it down, but was very much disappointed when it proved to be an oblinita, which it resembles quite a little.

On the evening of May 5, 1924, I saw what I thought to be an *Estigmene congrua* Wlk. sitting on a light pole and did not care to take it, but changed my mind and after maneuvring to get it with a long wire I was delighted to have a female *lanceolaria*. It pays to go to a little trouble if you get a rare specimen once in a while.—Frederick Lemmer.